

New England Biolabs Certificate of Analysis

Product Name: HpyCH4IV
Catalog Number: R0619L
Concentration: 10,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of pUC19 DNA in 1 hour at 37°C in a total reaction volume of 50 µl.
Lot Number: 10008620
Expiration Date: 04/2020
Storage Temperature: -20°C
Storage Conditions: 100 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA
Specification Version: PS-R0619S/L v1.0

HpyCH4IV Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0619LVIAL	HpyCH4IV	0171804	Pass
B7204SVIAL	CutSmart® Buffer	3091805	Pass

Assay Name/Specification	Lot # 10008620
Protein Purity Assay (SDS-PAGE) HpyCH4IV is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	Pass
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart Buffer containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 30 units of HpyCH4IV incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart Buffer containing 1 µg of pUC19 DNA and a minimum of 30 units of HpyCH4IV incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of pUC19 DNA with HpyCH4IV, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with HpyCH4IV.	Pass

This product has been tested and shown to be in compliance with all specifications.



Pengda Zhang
Production Scientist
18 Jun 2018



Michael Tonello
Packaging Quality Control Inspector
18 Jun 2018